



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,083	09/15/2005	Takashi Kuwabara	2005-0995A	9063

513 7590 10/16/2007
WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

CHOWDHURY, AFROZA Y

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,083

Applicant(s)

KUWABARA ET AL.

Examiner

Afroza Y. Chowdhury

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-6 and 8-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/15/2005</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, in claim 1, lines 11-12, **"one display device has an accommodating section formed at each of four corners thereof to accommodate a part of the coupling section"**, in claim 6, lines 5-8, **"a first supporting member engaged in the groove and sliding along the groove; a coupling member rotatably connected to the first supporting member; and a second supporting member rotatably connected to the coupling member and further supporting the one display device"** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Art Unit: 2629

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 5, 8, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sall** (US Patent 6,859,219).

As to claim 1, Sall discloses a display system comprising: two display devices (figs. 2, 5A, col. 3, lines 18-25);

a coupling section (figs. 5B(502, 504), 6A(602, 604)) for coupling the two display devices such that one display device can be displaced relative to the other display device (col. 7, lines 29-45);

a detection section for detecting a value by which a position of the one display device relative to the other display device can be identified (fig. 10(1006), col. 8, lines 11-31); and

a display control section for generating an image to be displayed on at least the one display device, based on the position detected by the detection section (fig. 10, col. 8, lines 31-36, 45-54, 63-65),

wherein the one display device displays the image generated by the display control section (fig. 10(1012), col. 8, lines 31-36), and

the one display device has an accommodating section formed at one corner to accommodate a part of the coupling section (fig. 2(202, 204)).

Sall does not explicitly teach the one display device has an accommodating section formed at each of four corners thereof to accommodate a part of the coupling section.

However, it is an obvious design choice to make one display device that has an accommodating section formed at one corner to make a duplicate at each of four corners thereof to accommodate a part of the coupling section for more displays.

As to claim 2, Sall teaches a display system wherein the display control section generates a first image and a second image by the display control section and one image is displayed across two display devices (col. 4, lines 47-50).

Sall does not specifically teach a display system where the display control section generates a first image representing a map of a predetermined area and a second image representing a map of an area surrounding the predetermined area.

However, it is obvious that the display control section of Sall's display system would be able to generate a first image representing a map of a predetermined area

Art Unit: 2629

and a second map image representing a map of an area surrounding the predetermined area and the images of the predetermined area would be displayed by the display devices.

As to claim 4, Sall teaches a display system where the coupling section is provided to a side of one display device (figs. 5B(502, 504)).

Sall does not teach a display system wherein the coupling section is provided to a backside of either the one or the other display device.

However, it is an obvious design choice to make a display system wherein the coupling section is provided to a backside of either the one or the other display device so as to couple the display devices such that either the other or the one display device can be fixed.

As to claim 5, Sall teaches a display system where the coupling section couples the display devices such that display sides of the one and the other display devices can be fixed facing in substantially a same direction (figs. 5B(502, 504), fig. 6B, fig. 7).

As to claim 8, Sall discloses a display system wherein the coupling section includes: a guide section (figs. 2, 5B(202, 204)) comprised in the one display device and having a groove formed therein which extends in substantially a same direction as a direction of one side of one display device; and a slide section comprised in the other

Art Unit: 2629

display device and sliding along the groove (fig. 2(202, 204), col. 3, lines 18-34).

As to claim 13, Sall discloses a display system comprising: two display devices (fig 2, 5A, col. 3, lines 18-25);

a coupling section for coupling the two display devices such that one display device can be displaced relative to the other display device (fig 7-8, col. 7, lines 29-45);

a detection section for detecting a value by which a position of the one display device relative to the other display device can be identified (fig. 10(1006), col. 8, lines 11-31); and

a display control section for generating an image to be displayed on at least the one display device, based on the position detected by the detection section (fig. 10, col. 8, lines 31-36, 45-54, 63-65),

wherein the one display device displays the image generated by the display control section (fig. 10(1012), col. 8, lines 31-36).

Sall does not specifically teach a coupling section for coupling the two display devices such that one display device can be automatically displaced relative to the other display device.

However, it would be an obvious design choice to have a coupling section for coupling the two display devices such that one display device can be automatically displaced relative to the other display device.

Art Unit: 2629

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sall** (US Patent 6,859,219) in view of **Hartman** (US Patent 6,067,78).

As to claim 3, Sall discloses a display system wherein the display control section generates an image that is displayed across two display devices (col. 4, lines 47-50).

Sall does not teach a display system wherein the display system is installed in a vehicle, and the display control section generates an image at least for a passenger in the vehicle.

Hartman teaches display screen that is viewable by a passenger (fig. 2, abstract, col. 2, lines 54-57).

Therefore, it is obvious to one skill in the art at the time of the invention was made to combine Hartman's dual screen display device with Sall's multiple display apparatus in order to make a flexible display device which is installed in a vehicle and the display control section generates an image at least for a passenger in the vehicle.

5. Claims 6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sall** (US Patent 6,859,219) in view of **Minami et al.** (US Patent 6,967,632).

As to claim 6, Sall discloses a display system where the display control section generates an image that is displayed across two display devices (col. 4, lines 47-50).

Sall does not teach a display system wherein the other display device has a groove of a predetermined shape formed in a backside thereof, the coupling section

includes: a first supporting member engaged in the groove and sliding along the groove; a coupling member rotatably connected to the first supporting member; and a second supporting member rotatably connected to the coupling member and further supporting the one display device.

Minami et al. teaches a display system where one display device has a groove of a predetermined shape formed on the side (fig. 22A(62d)) thereof, the coupling section includes:

a first supporting member (fig. 22B(64f)) engaged in the groove and sliding along the groove (fig. 22B(62d));

a coupling member (fig. 22A(65)) rotatably connected to the first supporting member (fig. 22B(64f)); and

a second supporting member (fig. 22A(66)) rotatably connected to the coupling member (fig. 22A(65)) and further supporting the one display device (fig. 22A(4)).

Therefore, it is obvious to one skill in the art at the time of the invention was made to incorporate the idea of Minami et al. of supporting monitor into Sall's display system in order to make a display system where a display device has a groove of a predetermined shape formed in a backside thereof, the coupling section includes: a first supporting member engaged in the groove and sliding along the groove; a coupling member rotatably connected to the first supporting member; and a second supporting member rotatably connected to the coupling member and further supporting the one display device.

Art Unit: 2629

As to claim 9, Sall teaches a display system where the display control section generates an image that is displayed across two display devices (col. 4, lines 47-50).

Sall does not teach a display system wherein the coupling section further includes a rotation section comprised at a midpoint of the guide section.

Minami et al. discloses a display system wherein the coupling section (fig. 22A(65)) further includes a rotation section (fig. 22A(69)) comprised at a midpoint of the guide section (fig. 22A(62)), and the rotation section (fig. 22A(69)) allows a part of the guide section to rotate relative to end points of a rest part of the guide section (fig. 22A(62)).

Therefore, it is obvious to one skill in the art at the time of the invention was made to incorporate the idea of Minami et al. of supporting monitor into Sall's display system in order to make a display system wherein the coupling section further includes a rotation section comprised at a midpoint of the guide section, and the rotation section allows a part of the guide section to rotate relative to end points of a rest part of the guide section.

As to claim 10, Sall discloses a display device to rotate in a first direction along a display side of either the other or the one display device (fig. 5A).

Sall does not teach a display system wherein the coupling section includes first and second supporting members comprised in the one and the other display devices, and the first and second supporting members are coupled together.

Minami et al. discloses a display system wherein the coupling section includes first and second supporting members comprised in the one and the other display devices (fig. 22A).

Therefore, it is obvious to one skill in the art at the time of the invention was made to incorporate the idea of Minami et al. of supporting monitor into Sall's display system in order to make a display system wherein the coupling section includes first and second supporting members comprised in the one and the other display devices, and the first and second supporting members are coupled together, and allow either the one or the other display device to rotate in a first direction along a display side of either the other or the one display device.

As to claim 11, Sall teaches a display system wherein the first and second supporting members further allow either the one or the other display device to rotate in a second direction vertical to the first direction (figs. 5A, 6B(604, 608)).

As to claim 12, Sall discloses a display system wherein the coupling section includes first and second supporting members comprised in the one and the other display devices, and the first and second supporting members are coupled together, and allow either the one or the other display device to rotate in a first direction vertical to a display side of either the other or the one display device (fig. 1).

Art Unit: 2629

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afroza Y. Chowdhury whose telephone number is 571-270-1543. The examiner can normally be reached on 7:30-5:00 EST, 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC
10/11/2007


AMARE MENGISTU
SUPERVISORY PATENT EXAMINER